

## Department of Ecology Guidance on Meeting the EPA Vessel General Permit's Graywater Requirements while in Washington State Waters

July 2010

EPA's Vessel General Permit (VGP) contains the graywater requirements which you must follow. Washington State did not add any conditions of our own to the VGP, but the VGP does require compliance with applicable state law. This guidance discusses both the VGP graywater requirements and applicable state laws.

### **The VGP graywater requirements in summary are:**

#### **VGP section - 2.2.15 Graywater**

##### Graywater requirements for all vessels

- All vessels must minimize the discharge of graywater while in port.
  - If any vessel cannot store graywater, the production of graywater in port should be minimized.
- All vessels must minimize the discharge of graywater when the vessel is not underway.
- All vessels must minimize the discharge of graywater when within 1 nm from shore.
- Any vessel within 1 nm of shore that has the capacity to store graywater must dispose of graywater on shore if appropriate facilities are available and such disposal is economically practicable and achievable.
- Any vessel within 1 nm of shore may discharge graywater if treated to meet the treatment standards and other requirements contained in Parts 5.1.1 and 5.1.2 or 5.2.1 and 5.2.2 unless the vessel has adequate storage capacity and is in waters listed in Part 12.1 or listed as nutrient impaired as described below.
- Any vessel that has the capacity to store graywater shall not discharge that graywater in waters listed in Part 12.1.
  - If the vessels cannot store graywater, the production of graywater while in waters listed in Part 12.1 should be minimized.
- Any vessel that has the capacity to store graywater shall not discharge that graywater to nutrient impaired waters (list available at [www.epa.gov/npdes/vessels](http://www.epa.gov/npdes/vessels)).
- If storage will be exceeded requiring a discharge to a nutrient impaired water, vessel operators must:
  - Minimize graywater production and discharge.
  - Conduct discharge while the vessel is underway to the extent feasible in areas with significant circulation and depth.
- If graywater will be discharged to waters subject to this permit, vessel operators must:
  - Minimize the introduction of kitchen oils to the graywater system.
  - Scrape food and oil residue from dishes to the extent practicable before placing in wash or rinse water that will be discharged with graywater.
  - Use only phosphate free and non-toxic soaps and detergents. These detergents must be free from toxic or bioaccumulative compounds and not lead to extreme shifts in receiving water pH.
- Oils used in cooking shall not be added to the graywater system.
- Oil from the galley and scullery shall not be discharged in quantities that may be harmful as defined in 40 CFR Part 110.3 (violate applicable water quality standards or cause a visible sheen, film, sludge, or emulsion on/in the water or on the shoreline).
- The VGP contains additional specific requirements for graywater from Cruise Vessels (Parts 5.1 and 5.2) and Large Ferries (Part 5.3).

##### Extra graywater requirements for vessels greater than 400 gross tons

- Any vessel over 400 gross tons that has the capacity to store graywater that regularly travels more than 1 nm from shore must discharge graywater greater than 1 nm from shore while underway.
- Vessel over 400 gross tons may discharge graywater within 1 nm of shore if treated to meet the treatment standards and other requirements contained in Parts 5.1.1 and 5.1.2 or 5.2.1 and 5.2.2.

#### **VGP section - 2.2.25 Graywater Mixed with Sewage from Vessels**

The commingled discharge of graywater mixed with sewage from vessels must comply with the effluent limits for graywater discharge in Part 2 and/or Part 5 of this permit and the requirements set forth in section 312 of the Clean Water Act and its implementing regulations found at 40 CFR Part 140 and 33 CFR Part 159. Discharges of graywater mixed with sewage must meet both standards to be in compliance.

## **The VGP also requires compliance with state laws:**

### **VGP section - 1.11 State Laws**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 of the Clean Water Act.

### **The most pertinent provisions of state law are:**

#### **RCW 90.48.080 Discharge of polluting matter in waters prohibited**

It shall be unlawful for any person to throw, drain, run, or otherwise discharge into any of the waters of this state, or to cause, permit or suffer to be thrown, run, drained, allowed to seep or otherwise discharged into such waters any organic or inorganic matter that shall cause or tend to cause pollution of such waters according to the determination of the department, as provided for in this chapter.

#### **RCW 90.48.020 Definitions**

Whenever the word "person" is used in this chapter, it shall be construed to include any political subdivision, government agency, municipality, industry, public or private corporation, copartnership, association, firm, individual or any other entity whatsoever.

Wherever the words "waters of the state" shall be used in this chapter, they shall be construed to include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Whenever the word "pollution" is used in this chapter, it shall be construed to mean such contamination, or other alteration of the physical, chemical or biological properties, of any waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.

## **The VGP requires compliance with state water quality standards:**

### **VGP section - 2.3.1 Water Quality-Based Effluent Limitations**

Your discharge must be controlled as necessary to meet applicable water quality standards in the receiving waterbody or another waterbody impacted by your discharges.

EPA generally expects that compliance with the other conditions in this permit, including Parts 2.1, 2.2, and 5, will control discharges as necessary to meet applicable water quality standards. If at any time you become aware, or EPA determines, that your discharge causes or contributes to an exceedance of applicable water quality standards, you must take corrective actions as required in Part 3; you must also report the exceedance(s) to EPA as required in Parts 1.13 and 4.4.1.

### **The important provisions in our state's water quality standards are:**

WAC 173-201A-200 contains our state's water quality criteria for fresh waters, WAC 173-201A-210 contains our state's water quality criteria for marine waters, and WAC 173-201A-230 contains our nutrient criteria for lakes. WAC 173-201A-200 and WAC 173-201A-210 contain water quality criteria for the same bacteria found in high numbers in graywater and blackwater.

WAC 173-201A-260 below describes our overall standard for water quality:

## **WAC 173-201A-260**

### **Natural conditions and other water quality criteria and applications.**

(2) **Toxics and aesthetics criteria.** The following narrative criteria apply to all existing and designated uses for fresh and marine water:

(a) Toxic, radioactive, or deleterious material concentrations must be below those which have the potential, either singularly or cumulatively, to adversely affect characteristic water uses, cause acute or chronic conditions to the most sensitive biota dependent upon those waters, or adversely affect public health (see WAC [173-201A-240](#), toxic substances, and 173-201A-250, radioactive substances).

(b) Aesthetic values must not be impaired by the presence of materials or their effects, excluding those of natural origin, which offend the senses of sight, smell, touch, or taste (see WAC [173-201A-230](#) for guidance on establishing lake nutrient standards to protect aesthetics).

### **The VGP forbids discharging to nutrient impaired waters if a vessel has adequate graywater storage.**

Even though neither Puget Sound nor any connected lake was listed as nutrient impaired in 2008, we are updating our list of impaired water bodies in 2010 and have concerns for both Puget Sound and the lakes. Puget Sound is an estuary with limited current flushing compared to open ocean waters. We strive to protect our fisheries and shellfish harvesting capabilities as well as recreational uses. Testing has found that untreated graywater can have levels of bacteria much higher than our state standards and high levels of nutrients that may contribute to algae blooms in Puget Sound. These pollutants detract from fish survival and make shellfish unfit to eat. Untreated wastewater discharges into Puget Sound impact the human use and enjoyment of this unique water body. We recommend not discharging graywater to Puget Sound or any lake. By far the easiest and clearest way to comply with the VGP, state laws, and state water quality standards is zero discharge of graywater or blackwater if you can possibly avoid doing so.

### **The VGP is only in effect out to 3 nm. State waters (and law) extend further than 3 nm in places. The definition of waters of the state where they extend beyond 3 nm is:**

Article XXIV of the Washington State Constitution defines the state boundary with Canada in marine waters to run along the 49<sup>th</sup> parallel from land west to longitude 123 degrees, 19 minutes, 15 seconds west (about midway from shore to Vancouver Island) and from there along the international boundary to a point equidistant between Bonilla Point on Vancouver Island and the Tatoosh Island lighthouse. The state boundary then runs south from this point.

### **Implications of these state laws:**

RCW 90.48.080 forbids discharges which cause pollution as defined in RCW 90.48.020. Creating an oil sheen, for example, would meet the definition of pollution. So would creating a visible sheen, film, sludge, or foam from a graywater discharge. Bacteria and nutrients, such as phosphorus or nitrogen, in graywater may cause noncompliance with state water quality standards.

### **EPA contact for reporting noncompliance:**

EPA Region 10  
Attn: NPDES Vessels Noncompliance Reports  
1200 6th Ave, Suite 900  
Seattle, WA 98101-1128  
Phone: (206) 553-1200  
Toll Free: (800) 424-4EPA